

AMENDMENTS TO THE CLAIMS

Please cancel Claims 8 and 9; and amend Claims 1, 5 and 11 as follows.

LISTING OF CLAIMS

1. (currently amended) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) signal into a direct current (DC) potential [[DC]] and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode for rectifying the high frequency power (RF) signal inputted on its anode;

a first transistor connected to an anode side of said diode, [[for]] said first transistor working as a high-resistance constant current source for supplying a constant current to the anode side of said diode by a positive potential being applied thereto; and

a second transistor inserted between a cathode side of said diode and ground, [[for]] said second transistor working as a high-resistance constant current source for removing a constant current from a current outputted from the cathode side of said diode by a positive potential being applied thereto.

2. (original) A start signal outputting circuit recited in claim 1, wherein said RF/DC convertor circuit further comprises a resonance circuit connected between said cathode side of said diode and ground for shorting with the high frequency power of a specified frequency.

3. (original) A start signal outputting circuit having an RF/DC convertor circuit for converting a high frequency power (RF) into a direct current potential (DC) and outputting it, said RF/DC convertor circuit comprising:

a device working as a diode;

a first npn transistor having its emitter connected to an anode side of said diode and its base and collector to which a predetermined positive potential is applied;

a second npn transistor having its collector connected to a cathode side of said diode and its emitter connected to ground via a resistance;

a third npn transistor having its emitter connected to a base of said second npn transistor and its base and collector to which a predetermined positive voltage is applied; and

a resonance circuit connected between said cathode side of said diode and ground for shorting a specified frequency.

4. (previously presented) A start signal outputting circuit recited in claim 1, wherein said RF/DC convertor circuit further comprises a matching circuit provided on said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

5. (currently amended) A start signal outputting circuit recited in claim 1, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so

that a differential RF/DC convertor part is formed by [[the]] said RF/DC convertor circuit and said counterpart circuit.

6. (original) A start signal outputting circuit recited in claim 5, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

7. (original) A start signal outputting circuit recited in claim 6, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

8.-9. (cancelled)

10. (previously presented) A start signal outputting circuit recited in claim 3, wherein said RF/DC convertor circuit further comprises a matching circuit provided on

said anode side of said diode for obtaining matching with respect to an inputted high frequency power.

11. (currently amended) A start signal outputting circuit recited in claim 3, further comprising a counterpart circuit of the same construction as said RF/DC convertor circuit, of which an anode of a device working as a diode is provided with a d.c. potential based on the positive potential given to said RF/DC convertor circuit, so that a differential RF/DC convertor part is formed by [[the]] said RF/DC convertor circuit and said counterpart circuit.

12. (previously presented) A start signal outputting circuit recited in claim 10, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

13. (previously presented) A start signal outputting circuit recited in claim 10, wherein a transfer function of a part composed of said low-pass filter and said

differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.

14. (previously presented) A start signal outputting circuit recited in claim 11, further comprising:

a differential amplification part for carrying out a differential amplification of at least one stage for an output of said differential RF/DC convertor part; and

a low-pass filter disposed at least one of between said differential RF/DC convertor part and said differential amplification part and a later stage of said differential amplification part,

wherein outputs of said differential amplification part and low-pass filter transmit a band of below 1/1000 compared to a band of said high frequency power signal.

15. (previously presented) A start signal outputting circuit recited in claim 11, wherein a transfer function of a part composed of said low-pass filter and said differential amplification part has a characteristic of monotonous decrease with frequency of a high frequency signal.